

Chapter 1

Tasks and Responsibilities

This chapter provides an overview of the tasks and responsibilities for a FA battalion. Section I discusses the basic tasks for a FA battalion and FA organization for combat. Section II outlines the responsibilities of key battalion personnel. This manual focuses on those TTP that are common to most FA battalions. For information unique to a specific type of FA battalion or battery, the reader should also refer to FM 6-50, *Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery*; FM 6-60, *Tactics, Techniques, and Procedures for Multiple Launch Rocket System (MLRS) Operations*; and FM 3-09.6, *Tactics, Techniques, and Procedures for M109A6 Howitzer (Paladin) Operations*.

SECTION I – TASKS AND FA ORGANIZATION FOR COMBAT

TASKS

1-01. In combat, the FA battalion provides indirect fire support (FS) to maneuver forces on the battlefield. To do this, it must perform six basic tasks:

- Deploy/Conduct Maneuver
- Develop Intelligence
- Employ Fires
- Perform Combat Service Support (CSS) and Sustainment
- Exercise C2
- Protect the Force

1-02. These six tasks form a starting point in identifying all of the responsibilities that a FA battalion has as part of a combined arms force. Units receive additional responsibilities during the organization for combat process.

FA ORGANIZATION FOR COMBAT

1-03. A FA battalion's basic C2 guidelines and responsibilities are established by its organization for combat. FA organization for combat is a two-step process involving the establishment of a command relationship and the assignment of a FA tactical mission. While FA organization for combat is usually a division or corps level process, FA battalion commanders and staffs should have a thorough knowledge of the principles of the process, and most especially, the implications for the battalion of the various command relationships and FA tactical missions.

1-04. This section provides an overview on FA organization for combat from a FA battalion perspective. Detailed information on organizing FA for combat is contained in FM 6-20-2, *Tactics, Techniques, and Procedures for Corps Artillery, Division Artillery, and Field Artillery Brigade Operations*.

COMMAND RELATIONSHIPS

1-05. The first step in organizing FA for combat is the establishment of a command relationship with a senior headquarters (HQ). This relationship is normally established with a FA HQ, such as a division artillery (DIVARTY), corps artillery (Corps Arty), or FA brigade. However, it can be established with a maneuver HQ. C2 ensures that FA contributes total, responsive FS that adequately supports the mission. The most common C2 relationships between a FA battalion and another unit are: organic, assigned, attached, or operational control (OPCON).

Organic

1-06. This relationship is the most permanent type of C2 relationship between an element and a military organization. Normally, this is done at the Department of Defense (DOD) or DA level and is shown in the unit TOE or modified TOE (MTOE). An example is a Firefinder radar (AN/TPQ-36) section organic to a 105 millimeter (mm) cannon battalion in an infantry division.

Assigned

1-07. This relationship places units or personnel in an organization on a relatively permanent basis. The gaining organization controls, administers, and provides logistical support to the assigned unit or personnel. Assignment is normally a DOD or DA level action done as part of the strategic tailoring process. An example is an FA battalion assigned to a division.

Attached

1-08. Attachment temporarily places units or personnel under the C2 of another organization. Subject to limitations imposed by the attachment order, the commander of the gaining unit receiving the attachment exercises the same degree of C2 over the attached unit as he does over organic units. The parent unit, however, retains the responsibility for transfer and promotion of personnel. The attachment order should clearly state the administrative and support responsibilities of the gaining unit to the attached unit. Attachment is frequently used as part of the tactical tailoring process at corps and below. An example is a corps FA battalion attached to a division (normally with subsequent attachment, by the division commander, to the DIVARTY).

Operational Control

1-09. OPCON is the authority delegated to a commander to direct forces assigned so that he may:

- Accomplish specific missions or tasks usually limited by function, time, or location.
- Deploy units concerned.

- Retain or assign tactical control of those units.

1-10. OPCON does not, of itself, include administrative or logistical control or responsibility. Normally, OPCON is not a command relationship given to FA units. FA tactical missions perform the same function yet more precisely define the relationship with the supported command.

Joint and NATO Considerations

1-11. If the FA battalion is operating as part of a joint (multi-service) or combined (multi-national) operation, battalion commanders may encounter several other command relationship terms: combatant command (COCOM), operational command (OPCOM), tactical control (TACON), and support. Detailed information on these command relationship terms can be found in FM 101-5-1, *Operational Terms and Graphics*; *Joint Publication (JP) 1-02*, *DOD Dictionary of Military and Associated Terms*; JP 3-0, *Doctrine for Joint Operations*; and JP 0-2, *Unified Action Armed Forces (UNAAF)*.

1-12. Commanders also need to understand that some of the command relationship terms used have slightly different definitions within NATO than within DOD. As an example, in NATO, OPCON does not include authority to assign separate employment of components of the units concerned. (The NATO definition of OPCON more closely represents the DOD definition of TACON.) During joint and combined operations, FA battalion commanders should verify the definitions of operational terms through review of applicable publications or with inquiries to higher HQ.

FA TACTICAL MISSIONS

1-13. Once command relationships are established, the force commander assigns the FA tactical missions. He bases his assignments on the advice of the force artillery commander, who is the FS coordinator (FSCOORD) for the force. (For details on the duties and responsibilities of the FSCOORD, refer to FM 6-20, *Doctrine for Fire Support*; FM 6-20-30, *Tactics, Techniques, and Procedures for Fire Support for Division Operations*; FM 6-20-40, *Tactics, Techniques, and Procedures for Brigade Operations*; and FM 6-71, *Tactics, Techniques, and Procedures for Fire Support for the Combined Arms Commander*.)

1-14. An assigned FA tactical mission may be one of four standard FA tactical missions or a nonstandard FA tactical mission. The four standard FA tactical missions are DS, R, GSR, and GS. Nonstandard FA tactical missions are developed when none of these standard missions sufficiently addresses FA tactical requirements and/or responsibilities.

1-15. A FA tactical mission describes in detail the support responsibilities of a FA unit. The mission also clearly defines the relationship of the FA unit with a maneuver unit or another FA unit. It does not affect the organizational structure or the command relationships that result from that structure. Each standard FA tactical mission contains several inherent responsibilities (see Table 1-1). Nonstandard FA tactical missions usually address changes that are needed in these responsibilities or additional responsibilities not addressed by the standard missions.

Table 1-1. Inherent Responsibilities of Standard FA Tactical Missions

INHERENT RESPONSIBILITIES OF STANDARD FIELD ARTILLERY TACTICAL MISSIONS				
AN FA UNIT WITH A MISSION OF	DIRECT SUPPORT	REINFORCING	GENERAL SUPPORT REINFORCING	GENERAL SUPPORT
Answers calls for fire in priority from -	1. Supported unit 2. Own observers ¹ 3. Force FA HQ	1. Reinforced FA 2. Own observers ¹ 3. Force FA HQ	1. Force FA HQ 2. Reinforced unit ¹ 3. Own observers ¹	1. Force FA HQ 2. Own observers ¹
Has as its zone of fire -	Zone of action of supported unit	Zone of fire of reinforced FA unit	Zone of action of supported unit to include zone of fire of reinforced FA unit	Zone of action of supported unit
Furnishes FS personnel ² -	Provides temporary replacements for casualty losses as required	No requirement	No requirement	No requirement
Furnishes liaison to -	No requirement	Reinforced FA unit HQ	Reinforced FA unit HQ	No requirement
Establishes communication With -	Company FS officers and supported maneuver unit HQ	Reinforced FA unit HQ	Reinforced FA unit HQ	No requirement
Is positioned by-	DS FA unit commander or as ordered by force FA HQ	Reinforced FA unit or as ordered by force FA HQ	Force FA HQ or reinforced FA unit if approved by force FA HQ	Force FA HQ
Has its fires planned by -	Develops own fire plan	Reinforced FA unit HQ	Force FA HQ	Force FA HQ
¹ Includes all target acquisition (TA) means not deployed with supported unit (radar, aerial observers, survey parties, and so on). ² A FS element (FSE) for each maneuver brigade, battalion, or cavalry (cav) squadron and one FS team (FIST) with each maneuver company or ground cavalry troop are trained and deployed by the FA unit authorized these assets. USMC artillery battalions, upon deployment, provide forward observer (FO) teams to each company-sized maneuver unit. After deployment, FISTs, and FSEs remain with the supported maneuver unit throughout the conflict.				

Direct Support

1-16. The DS mission is used to provide responsive FA fires to a particular maneuver unit. A FA battalion operating in DS of a maneuver unit is primarily concerned with the FA support needs of only that maneuver unit. The DS battalion commander is the FSCoord for the supported maneuver force. Fires are planned and coordinated with the maneuver unit and the DS battalion commander positions his units where they can best support the scheme of maneuver. Because of this, a DS FA battalion's planning process and operations are significantly integrated with their counterparts in the supported maneuver unit. To best achieve the required coordination and training, the same FA battalion should habitually support the same maneuver force. DS is the most decentralized standard FA tactical mission.

Reinforcing

1-17. Commanders use the reinforcing mission to add weight (fires) to a specific area or maneuver unit by designating one or more FA units to

augment the fires of another FA unit. A FA battalion will generally reinforce a FA battalion (or possibly a FA brigade) that has a DS mission. A reinforcing FA battalion can reinforce only one FA unit, but a reinforced battalion can be reinforced by more than one FA unit.

General Support

1-18. A FA battalion assigned the mission of GS supports the maneuver force as a whole and remains under the immediate control of the force artillery HQ. This mission ensures artillery is immediately responsive to the needs of the maneuver force commander. Like the DS mission, the GS mission establishes a relationship between a FA unit and a maneuver unit. It is the most centralized of the standard FA tactical missions.

General Support Reinforcing

1-19. The GSR mission requires the FA battalion to furnish FA fires for the maneuver force as a whole and to reinforce the fires of another FA battalion as a second priority. A GSR battalion remains under the control of the force FA HQ. The GSR mission gives the maneuver force commander the flexibility to respond to a variety of tactical situations.

Nonstandard FA Tactical Missions

1-20. If an unusual tactical situation exists, or none of the standard FA tactical missions accurately convey the maneuver commander's guidance for fires, he assigns a nonstandard FA tactical mission to the FA unit. A nonstandard FA tactical mission may amplify, limit, or change one or more of the seven inherent responsibilities, or it may spell out contingencies not covered by those responsibilities. If the revision is so complex that the standard FA mission is no longer recognizable, a nonstandard mission statement will address each of the seven inherent responsibilities.

1-21. Units sometimes use a nonstandard mission when there are not sufficient FA assets to cover all the contingencies or if a FA battalion is assigned more than one functional mission. It is also a means by which the commander can tailor his FA assets in anticipation of future operations. A nonstandard mission may involve limitations or guidance concerning ammunition, positioning, or other critical factors.

EXAMPLES OF NONSTANDARD FA TACTICAL MISSIONS

1-50 FA (155SP, M109A6): GSR 1-20 FA; do not exceed 50 percent of CSR in support of 1-20 FA.

1-89 FA (MLRS, M270A1): GS; provide liaison officer to DIVARTY TOC.

SP = self-propelled, CSR = controlled supply rate, TOC = tactical operations center

On-Order (o/o) FA Tactical Missions

1-22. During the course of a major operation, a FA battalion may change tactical missions. The assignment of an o/o FA tactical mission, in addition to its initial mission, gives the battalion advance notice of the future mission. This facilitates planning for and transition to the follow-on mission.

Positioning, ammunition requirements, and timing of the mission change are several of the key considerations for battalions that have an o/o mission. An o/o mission is usually stated in the maneuver operations order/FS plan (FSP) and/or the FA support plan (FASP).

EXAMPLES OF O/O FA TACTICAL MISSIONS

1-50 FA (155SP, M109A5): R 1-20 FA (do not exceed 25% CSR is support of 1-20 FA); o/o DS 3 Bde.

1-89 FA (155SP, M109A6): DS 1-23 Cav (division security force); after completing rearward passage, o/o GS 52 Infantry Div (Mechanized).

Div = division

Dedicated Battery

1-23. In special circumstances where immediately responsive fires are required, and/or the supported maneuver unit is operating independently or at an excessive distance from its parent unit, a dedicated battery can be established. "Dedicated battery" describes both a nonstandard tactical mission and informal support relationship whereby a battery-sized FA unit assumes responsibility for fulfilling a modified prioritized list of inherent responsibilities towards a battalion-sized maneuver unit. Establishing a dedicated battery is recommended by the FSCOORD and approved by the maneuver (normally brigade) commander.

1-24. A dedicated battery establishes communications with and responds to calls for fire from a specified maneuver force (usually a battalion task force) as its first priority (see Table 1-2). The battery will plot fires on the targets planned by the TF FSO. The artillery battalion will also plot these fires in case additional support is required. Close coordination between the supported maneuver unit and the dedicated battery is required. The battery commander must fully understand the maneuver battalion commander's intent and scheme of maneuver and should attend all maneuver rehearsals. Likely enemy locations and composition must be identified. Munitions for engaging the probable enemy targets must be identified. When not firing missions, the guns of the dedicated battery will be laid on the firing data for the next planned target identified by the maneuver unit. Subordinate unit leaders (company, platoon, and even squad) must understand the fire plan and be able to request and adjust fires. Intervention rules for FATDS systems will allow maximum responsiveness while providing safety from fratricide.

1-25. The circumstances and situations that call for the proper use of a dedicated battery are highly specific. A dedicated battery may be used to provide support to the lead battalion task force in a brigade or larger movement to contact when responsive vice massed fires is critical. The location of enemy forces is either unknown or suspect. The chance of unanticipated enemy fires (e.g. ambush) must be high. ROE must be very permissible. A dedicated battery is not the normal condition while providing fires to maneuver forces. The extensive use of dedicated batteries reduces the ability of the FA battalion to mass its fires on the targets that meet the

brigade commander's intent and must be weighed against the capability to execute the other EFATs assigned. In order to permit continuous coverage for a moving battalion task force, the FA battalion may be forced to use several batteries. In this case, the remaining battalions of the brigade will have to rely on their organic mortars as their first choice for indirect fires against targets of opportunity.

Table 1-2. Inherent Responsibilities of a Dedicated Battery

ANSWERS CALLS FOR FIRE IN PRIORITY FROM:	HAS AS ITS ZONE OF FIRE:	FURNISHES FS PERSONNEL TO:	FURNISHES LIAISON TO:	ESTABLISHES COMMO WITH:	ESTABLISHES QUICK FIRE CHANNEL WITH:	IS POSITIONED BY:	HAS ITS FIRES PLANNED BY:
1. Supported Unit 2. Parent HQ	Zone of action of Supported Unit	BC as FSO if none in the supported unit	Supported Unit ¹	Supported Unit	Per Supported Unit Instructions	Supported Unit	Supported Unit ²
1. Battery personnel (BC, XO, gunnery sergeant...) may perform liaison functions without being permanently positioned with the supported unit. 2. Parent units may also plan fires for the dedicated battery (e.g. using multiple batteries or in preparation of a mission change back to parent unit control).							

FA Tactical Missions in Combined Operations

1-26. As stated, each of the standard FA tactical missions has specific inherent responsibilities. However, these tactical missions and responsibilities are not viewed the same by the armies of nations with which the US may operate. These differences must be identified and understood whenever FA battalions are involved in combined operations. A FA battalion commander may be required to operate in an environment covered by bilateral agreements. In this environment, the operation order (OPORD) will be his guide for bilateral operations. The US and its NATO allies have agreed to the terms of STANAG 2934, *Artillery Procedures*, with changes. When they are supporting allied troops or working with allied artillery, FA battalion commanders must know the responsibilities included in these agreements as viewed by other nations (see Table 1-3 for responsibilities in a NATO or Australia, Britain, Canada, America (ABCA) environment).

Table 1-3. Inherent Responsibilities of FA Tactical Missions - (NATO and ABCA)

INHERENT RESPONSIBILITIES OF FIELD ARTILLERY TACTICAL MISSIONS (NATO and ABCA)				
AN FA UNIT WITH A MISSION OF	DIRECT SUPPORT	REINFORCING	GENERAL SUPPORT REINFORCING	GENERAL SUPPORT
Answers calls for fire in priority from -	1. Directly supported formation/unit 2. Own observers 3. Force FA HQ ¹	1. Reinforced artillery unit 2. Own observers 3. Force FA HQ ¹	1. Force FA HQ ¹ 2. Reinforced artillery unit 3. Own observers ³	1. Force FA HQ ¹ 2. Own observers
Has as its zone of fire -	Zone of action of the directly supported formation/unit ⁴	Zone of fire of reinforced FA unit or zone prescribed	Zone of action of the supported formation/unit to include zone of fire of the reinforced FA unit	Zone of action of the supported formation/unit or zone prescribed
Furnishes FS personnel -	Each maneuver company of the directly supported formation/unit	Upon a request of reinforced FA unit ²	Reinforced FA unit if approved by force FA HQ ^{1, 2, 3}	No inherent requirement
Establishes liaison with -	Directly supported formation or unit (battalion, regiment and brigade)	Reinforced FA unit	Reinforced FA unit	No inherent requirement
Establishes communication with-	The directly supported maneuver formation/unit	Reinforced FA unit	Reinforced FA unit	No inherent requirement
Weapons moved and deployed by -	DS FA unit commander or as ordered by force FA HQ ¹	Reinforced FA unit or ordered by force FA HQ ¹	Force FA HQ ¹ or reinforced FA unit if approved by force FA HQ ¹	Force FA HQ ¹
Has its fires planned by -	Develops own fire plans in coordination with directly supported formation/unit	Reinforced FA unit	Force FA HQ ¹ or as otherwise specified ³	Force FA HQ ¹
¹ Force artillery HQ or higher authority HQ. ² Applies also to the provision of liaison officers (LNOs). ³ Italy, in GSR, does not answer calls for fire from own observers, does not furnish FO, and has its fire planned by the HQ of the artillery-unit which receives the GSR. ⁴ Netherlands FA in DS will not furnish FOs and/or FS officers (FSOs) since these elements are part of the maneuver units. United Kingdom (UK) artillery is not established (organized) to provide all maneuver companies of the directly supported unit/formation with a FO.				

SECTION II – RESPONSIBILITIES OF KEY PERSONNEL

1-27. The activities of the FA battalion are supervised by a number of key personnel in addition to the battalion commander, the command sergeant major (CSM), and the executive officer (XO). These include primary staff officers such as the S1 (personnel officer), S2 (intelligence officer), S3 (operations officer), S4 (logistics officer), and S6 (communications and electronics staff officer [CESO]). The chaplain is a member of the personal staff.

1-28. Special staff officers include the fire direction officer (FDO), targeting officer, chemical officer, physician's assistant, battalion maintenance officer (BMO), battalion ammunition officer (BAO) (or support platoon leader [SPL]), and, in some battalions, the brigade and battalion FSOs and LNO.

1-29. The duties of each of these personnel are briefly discussed below. Additional information on battalion staff organization and the duties of staff personnel can be found in FM 101-5, *Staff Organization and Operations*.

COMMAND SECTION

BATTALION COMMANDER

1-30. The battalion commander, aided by the battalion staff and the battery commanders, controls all the tactical, logistical, administrative, and training activities of the battalion. He directs employment of the battalion in accordance with assigned missions, guidance from the force FA HQ, and in the DS role, the supported maneuver force. He works closely with the commanders of supported and supporting units to ensure that the battalion can accomplish its mission. Specific responsibilities include:

- Oversee the training of the entire battalion, with particular emphasis on those elements directly concerned with delivery of fires and FS.
- Continually assess the needs of the battalion in terms of its ability to sustain its internal operations and to support assigned missions.
- Establish clear and consistent standards and guidance for current and future operations. Ensure the battalion staff and battery commanders understand the battalion commander's intent.
- Establish policies to promote discipline and morale within the battalion.
- Provide for the administrative and logistical support of the battalion.
- In a DS mission, perform FSCOORD duties
 - Advise the supported maneuver commander on all FS matters.
 - Direct and supervise the planning and coordination of all FS assets supporting the maneuver unit, to include FSEs and FISTs.
 - Coordinate/control the operations and/or fires of R/GSR FA units.
 - Direct and supervise preparation of the FSP and the FASP as documents in support of the maneuver plan.
 - See FM 6-20-40 for additional discussion on the FSCOORD responsibilities of the DS FA battalion commander.

COMMAND SERGEANT MAJOR

1-31. The battalion CSM is the senior enlisted advisor to the commander. He is both a specialist and a generalist, as he must have technical competence as a field artilleryman while being broadly knowledgeable in all functional areas such as operations, administration, and logistics. The CSM best serves as an extension of the commander's eyes and as his primary troubleshooter. He works closely with each of the battalion staff sections and the firing battery leaders, frequently changing his area of focus based on the needs of the unit and the direction of the commander.

1-32. The CSM usually operates independently of but complementary to the commander, frequently at a critical location where the commander needs additional supervision, oversight, or observation. Because of this, the CSM requires his own vehicle, radio, and driver. The CSM's duties include:

- Assist the commander in maintaining effective communication with senior and subordinate leaders and staffs.
- Validate that the commander's directions and intent are being properly communicated through the leadership chain to the front line soldiers and that their feedback and concerns are reaching the commander.
- Advise the commander and staff on all matters pertaining to enlisted soldiers.
- Assist the S3 in planning, coordinating, and supervising collective and individual training to include certification requirements.
- Mentor unit first sergeants (1SGs) and noncommissioned officers (NCOs), supervise and direct NCO professional development, identify and develop future leaders from within the enlisted ranks.

EXECUTIVE OFFICER

1-33. As second in command and chief of staff, the XO must keep fully abreast of current and anticipated operations. He must be prepared to assume the duties of the commander when the need arises. He must position himself forward, traveling between the battalion command post (CP), the batteries, and the battalion trains area to perform his duties. Key duties in addition to those in FM 101-5, include:

- Direct, supervise, and coordinate all staff actions and operations, to include the battalion's military decision-making process (MDMP), especially production of the FASP, and, when applicable, battalion staff involvement in the FSP.
- Supervise and direct all CSS efforts within the battalion, to include development of the battalion's trains concept and CSS plan.
- Direct and supervise operations of the administration and logistics operations center (ALOC) and battalion support operations center (BSOC).
- Perform face-to-face contact with his counterparts on the maneuver, DIVARTY, Corps Arty, or FA brigade staff as required.
- Direct and supervise development of continuity of operations (CONOPS) plans for the CP, the various operations centers, and each staff section.

- Direct and supervise development of mutual support unit (MSU) operations, as necessary or as directed, with another FA unit.
- In the battalion commander's absence, enforce the commander's standards throughout the unit.

1-34. The battalion commander decides which function the XO will give his primary focus at any given time. This decision is based on the immediate requirements of the battalion and the overall tactical situation. Changing situations will require periodic changes in the XO's focus. The XO must recognize his primary function is to understand the battalion commander's intent and that he is normally the senior officer at the battalion responsible for executing that intent. When he is functioning primarily as second in command, one or more of the primary staff officers (often the S4) assumes a major portion of the functions of senior logistics coordinator. When the XO concerns himself primarily with the logistics support of the battalion, the S3 assumes a greater portion of the commander's duties in the battalion area.

S1 (PERSONNEL OFFICER)

1-35. The S1 plans, directs, and supervises the personnel, administrative, and health services for the battalion. He supervises the battalion personnel administration center (PAC) and serves as a shift leader in the ALOC or the BSOC. In addition to those listed in FM 101-5, the S1's duties include the following:

- Advise the commander and staff on all S1 areas, to include:
 - Strength accounting and replacement operations.
 - Casualty reporting.
 - Coordination of legal services.
 - Finance and postal services.
 - Administrative procedures and services.
 - Enemy prisoners of war (EPW) planning and coordination.
 - Health services.
 - Awards and evaluations.
 - Morale support activities.
- Recommend personnel priorities and employment of S1 assets that support the commander's intent and mission accomplishment.
- Prepare personnel/medical estimates and plans. In conjunction with the S4, prepare paragraph 4 of the FASP and the CSS plan/tab.
- In conjunction with the S4, establish and maintain the ALOC and BSOC. Supervise operations of the BSOC (if one is established – see Chapters 2 and 7 for additional ALOC/BSOC information).
- Ensure the S1 section and, when applicable, the BSOC establish and maintain situational awareness – of the general situation, FA battalion operations, and CSS, especially personnel/medical.
- Review the battalion's essential FA tasks (EFATs) for critical personnel, medical, and EPW requirements (e.g., personnel cross-leveling to achieve necessary strength, experience levels, or a particular skill in a battery or section).

S2 (INTELLIGENCE OFFICER)

1-36. The S2 performs a wide variety of tasks concerning intelligence, targeting, and force protection. In addition, he helps the S3 supervise the TOC operation. In addition to those listed in FM 101-5, the S2's duties include the following:

- Supervise the intelligence section.
- Develop artillery intelligence preparation of the battlefield (IPB) in conjunction with other staff elements and the senior FA HQ, with the supported maneuver S2 (DS units), and the S2 for any supporting/supported FA units.
- Develop enemy artillery order of battle and monitor tactics and techniques of enemy artillery, mortars, and TA assets.
- Predict artillery target locations and pass predicted locations to a fire control facility (FSE or fire direction center [FDC]), targeting cell, or weapon platform as appropriate.
- Provide survivability and mobility information to the battalion S3.
- In conjunction with the S6, assess the enemy's capability to interfere with signal communications and supervise the counterintelligence aspects of signal operations within the battalion.
- Recommend commander's critical information requirements (CCIR), especially priority intelligence requirements (PIR), related to the primary mission, tasks, and role of the battalion.
- Prepare intelligence estimates and portions of the FASP (the enemy situation portion (paragraph 1a) and the TA tab), with the assistance of the targeting officer and the radar section leader. This includes the radar deployment order (RDO) when applicable.
- In coordination with maneuver and FA S2s, as appropriate, organize and supervise an aggressive collection effort designed to answer PIR.
- Advise and assist the S3 in positioning, tasking, and supervising organic/attached TA assets, and coordinating survey for TA assets.
- Assist the S3 in managing the counterfire fight.
 - Develop and collect the intelligence and TA data necessary to support counterfire operations.
 - Recommend radar employment, positions, decision points for cueing and moving the radar, cueing schedules, and radar zones.
 - Template potential enemy locations, determine enemy-to-friendly FA force ratios, evaluate enemy FA/TA capabilities and tactics, and advise the FA battalion and maneuver commanders on the enemy indirect fire and counterfire threats.
 - Ensure IPB analysis includes evaluation of the role and capabilities of ground, air, and naval forces, and possibly even satellite/space-based assets in the enemy's counterfire program.
- Ensure all subordinate and supporting units are kept informed of the enemy situation.
- Coordinate the battalion ground and air defense plans.
- Advise the commander and staff on control of classified materials.
- Request and distribute maps (paper/digital), as required.

S3 (OPERATIONS OFFICER)

1-37. The S3 is responsible for training, planning, and execution of battalion operations. In addition to those listed in FM 101-5, S3 duties include:

- Advise the FA battalion commander in these specific areas:
 - FA organization for combat and FA attack guidance.
 - Identification and development of essential FS tasks (EFSTs) and EFATs.
 - Positioning and movement of firing/TA assets, CP, ALOC, BSOC.
 - The FA operations estimate, MDMP, and the FASP.
 - Employment of organic, attached, and reinforcing firing units.
 - Employment of organic or attached radars and other TA assets.
 - Employment of organic or attached survey assets.
 - CSS priorities, in coordination with the XO, S4, and S1.
 - Rehearsal supervision.
- Supervise and direct the operations and positioning of the TOC.
- Plan, coordinate, and control tactical movement, to include selection of positions, preparation of the tactical movement plan, and terrain management, for all elements under the battalion's control or direction.
- Supervise and direct preparation and dissemination of the FASP, orders, and directives.
- Plan, supervise, and direct battalion survey operations.
- Coordinate plans with higher, subordinate and adjacent FA units.
- Ensure databases and commander's guidances in automated C2 equipment are correct and properly coordinated within the battalion.
- In coordination with the S4 and BAO, plan and manage ammunition consumption, distribution, and resupply. Calculate ammunition requirements, basic loads, and required supply rates (RSRs)/CSRs.
- Integrate operations security (OPSEC) into the overall operations of the unit.
- Establish, in coordination with the S6, communications priorities.
- Direct and supervise the planning and execution of the FA battalion's participation in the counterfire fight.
 - Ensure counterfire plans meet the intent and guidance of the supported maneuver commander and of the FA battalion and force /higher FA commanders, as appropriate.
 - Ensure that priorities, mission routing, clearance of fires, and attack guidances for counterfire within the battalion's zone of fire are coordinated and understood by all members of the TOC and by the firing battery leaders.
 - In a DS role, maintain close coordination with the brigade FSE and force FA HQ to ensure that all of the battalion's counterfire responsibilities are coordinated and that higher and supported unit requirements do not conflict or overtax the FA battalion.

- Supervise radar management to ensure radar zone management, sector assignments, cueing, and positioning are properly incorporated into the decision support template (DST)/synchronization matrix and the TA tab to the FASP.
- Identify detailed counterfire responsibilities, to include specified and implied counterfire tasks, and assign counterfire responsibilities during the planning process.
- Ensure counterfire ammunition requirements are addressed in overall ammunition requirements. Evaluate assigned CSRs to determine the impact on counterfire responsibilities.
- With the S2 and FDO, evaluate force protection issues inherent in counterfire tasks and tactics.
- Coordinate meteorology (met) support for the battalion.

S4 (LOGISTICS OFFICER)

1-38. The S4 coordinates and manages logistical supply for the battalion. He supervises the battalion supply and ammunition sections, and serves as a shift leader in the ALOC. The S4's duties include the following:

- Advise the commander and staff on all S4 areas, to include:
 - CSS C2 – centralized versus decentralized CSS operations.
 - Battalion trains concept and positioning (see Chapter 7).
 - Ammunition estimates, distribution, and resupply operations.
 - Refueling operations.
 - Transportation requirements and main supply route (MSR) selection and operation.
 - Unit movements.
- Prepare logistics estimates and plans using logistics preparation of the battlefield (LPB) methodology (see Chapter 7). With the S1, prepare paragraph 4 of the FASP and the CSS plan/tab.
- Supervise, manage, and coordinate battalion supply and sustainment operations, to include ammunition and refueling.
- Distribution operations for all classes of supply except Class VIII (medical) within the battalion.
- Recommend logistics priorities and employment of S4 assets that support the commander's intent and mission accomplishment.
- With the S1, establish and maintain the ALOC and BSOC. Supervise operations of the ALOC.
- Ensure the S4 section and the ALOC establish and maintain situational awareness – of the general situation, FA operations, and CSS.
- Plan and coordinate administrative movements.
- Review the battalion's EFATs for critical logistical requirements (e.g., combat configured loads (CCLs) of ammunition, hot refuel).

S6 (COMMUNICATIONS AND ELECTRONICS STAFF OFFICER)

1-39. The S6 is responsible for communications and automation operations, management, and security. The S6 is a coordinating staff officer and is

directly accountable to the XO. In addition to those listed in FM 101-5, S6 duties include the following:

- Advise the commander and staff on:
 - Selection of unit position areas (PAs), from a communications standpoint.
 - Communications and automation planning, operations, priorities, security, training, and rehearsals.
 - Electronic counter-counter measures (ECCM).
 - Communications and automation requirements associated with EFSTs and EFATs, e.g., unique communications and/or automation equipment, nets, database exchange, or procedures for sensor-to-shooter links or other critical communications.
- Plan, manage, and direct communications operations to include establishment of communications networks and systems and installation and maintenance of equipment.
 - Coordinate integration of battalion communications systems into those of a supported maneuver/FA unit and a FA HQ.
 - Coordinate with signal units for communications support.
 - Supervise operator and organizational maintenance of communication equipment.
 - Manage all frequency allocations and assignments.
- Manage and direct communications security (COMSEC). Direct and supervise the battalion COMSEC custodian who issues and accounts for COMSEC equipment, key lists, codes, ciphers, signal operating instructions (SOI), and authentication systems.
- Plan, manage, and direct automation systems administration, maintenance, and security.
 - Establish automation systems administration and security procedures for automation hardware and software.
 - Supervise and direct battalion local area networks (LANs) configuration and usage of battalion network capabilities.
- Prepare communications estimates and write the signal paragraph (paragraph 4a) of the FASP.
- Perform communications reconnaissance and survey to assist the S3 in positioning key elements of the battalion, to include retransmission (retrans) stations.

BATTALION CHAPLAIN

1-40. The chaplain serves the commander as the special/personal staff officer to plan, synchronize, coordinate, and provide personally delivered religious support within the commander's area of responsibility. He advises the commander on moral and ethical issues. He develops a religious support plan, conducts field services, and manages soldier welfare ministries. He provides counseling, as required, for all soldiers and helps maintain the morale and spiritual well being of all personnel. The chaplain is supported by a chaplain assistant who performs religious support duties and coordination for religious programs, worship, and crisis intervention.

BATTALION MAINTENANCE OFFICER

1-41. The BMO advises the commanders and the XO on maintenance procedures. He recommends maintenance procedures, priorities, and policies. He coordinates DS maintenance and manages and directs maintenance support teams. The BMO monitors and assists with battery level resupply of Class IX repair parts. He consolidates and forwards maintenance specific reports. The BMO operates from the ALOC.

BATTALION OPERATIONS SECTION

ASSISTANT S3

1-42. The assistant S3 supervises the activities of the operations section and manages the TOC operations in the absence of the S3. The assistant S3 constructs the FA support matrix (FASM) and the FA positioning overlay for the FASP. During execution, the assistant S3 may position himself near the operations situation map and status boards. He is responsible for maintaining current information on the status boards; supervising the upkeep of the operations map and overlay; verifying target plotting on the target overlay and advising the S3 of any targets that violate graphical FS coordinating measures (FSCMs) or maneuver control measures. His focus is on positioning and ranging targets established in the FSP, maintaining tube strength, and coordinating ammunition resupply. He positions and moves organic or attached radars in conjunction with the S2 and the targeting officer.

OPERATIONS NONCOMMISSIONED OFFICER

1-43. The operations NCO supervises the activities of all NCOs/enlisted soldiers in the TOC and assists the assistant S3 with operations functions. He performs and supervises net control duties for the battalion command net, maintains the staff journal and message log, and ensures the situation map/charts are current at all times. He also ensures the TOC complex is properly supplied and maintained.

BATTALION MASTER GUNNER

1-44. The battalion master gunner is the weapon system expert in the battalion. He should be the battalion's most knowledgeable soldier on the unit's primary weapon system (howitzer or MLRS launcher). He must be well versed on all aspects of the weapon (operation, maintenance, training, and record keeping) and where applicable, its supporting ammunition vehicle. The battalion master gunner's duties and responsibilities are as follows:

- Assist the S3 and CSM in managing the battalion's individual and crew training and certification program for 13B or 13M soldiers. This includes training and certification of officers and senior NCOs. Place special attention on the training and evaluation of howitzer/launcher section chiefs. Plan and conduct battalion certification events.
- Assist the S3 in management of the individual and crew training and certification program for all military occupational specialties (MOS).

- Assist the S3 in management of the battalion artillery safety program and coordinate these efforts with the battalion safety officer/NCO as part of the battalion's overall safety program.
- Assist the S3 and XO with maintaining maximum readiness and operational status in primary weapon systems. This includes crew training and maintenance issues for howitzers, launchers, and ammunition vehicles. Maintain close coordination with battalion and battery maintenance supervisors and with unit artillery mechanics.
- Assist the batteries with the management of their 13B or 13M training programs and with battery safety programs.
- Troubleshoot problems on the battalion's primary weapon system and ammunition vehicles. This is mainly in a support role to the gunnery sergeants in the firing batteries.
- Assist the S3 and S1 in maintaining the most current information and training packages on primary weapon systems and their supporting ammunition vehicles, to include FMs, technical manuals (TMs), bulletins, training circulars, training support packages, and all other possible pertinent information. The master gunner must frequently check official internet sites, professional publications, and other sources of information for current and emerging tactics, techniques, procedures, training, and safety information.
- Maintain a dialogue with master gunners in other battalions to ensure rapid identification of new issues noted by other units.
- Assist the S3 in rapid dissemination of all critical information concerning the battalion's primary weapon platform.

CHEMICAL OFFICER/NONCOMMISSIONED OFFICER

1-45. The chemical officer advises the commanders and staff on nuclear, biological, and chemical (NBC) defensive operations, contamination, and predicted enemy strikes. He also writes the NBC portion of the FASP; maintains current status of decontamination sites in the area of operations (AO) and mission-oriented protective posture (MOPP) requirements; and he processes all NBC reports.

BATTALION INTELLIGENCE SECTION

TARGETING OFFICER

1-46. In divisional DS cannon battalions, the targeting officer is in the maneuver brigade FSE and assists both the brigade FSO and the maneuver S2 with targeting. He also assists the DS FA battalion S2 as possible. The duties for a targeting officer in a DS unit are outlined in FM 6-20-40.

1-47. In divisional GS FA battalions and corps level FA battalions the targeting officer is in the intelligence section. In addition to his targeting duties, he functions as an assistant S2. His duties include the following:

- Assist the S2 and S3 in target production, processing, and administration and with external targeting coordination.
- Assist the S2 with order of battle development and IPB.

- Help the battalion S2 write the intelligence, TA, and surveillance portions of the FASP, to include the RDO when applicable.
- Help plan for and manage attached, organic, and OPCON TA assets.
- Assist the battalion S2 and S3 with development and execution of the FA TA and counterfire plans.
- Assist the S2 in identifying CCIR.
- Supervise the intelligence section in the absence of the S2.
- Perform officer in charge (OIC) shift duties for the S2 section.
- Conducts predictive battle damage assessments (BDA) and request BDA from external sources/higher HQ.

INTELLIGENCE SERGEANT

1-48. The intelligence sergeant assists the S2 in the planning, supervision, and execution of intelligence and targeting operations. The intelligence sergeant may be a shift leader for the section, especially if there is no targeting officer. In DS cannon battalions, the intelligence sergeant may perform many of the section's targeting functions. In Advanced Field Artillery Tactical Data Systems (AFATDS) units, the intelligence sergeant may also be a primary AFATDS operator.

BATTALION FIRE DIRECTION CENTER

FIRE DIRECTION OFFICER

1-49. The FDO supervises tactical and technical fire direction (FD) within the battalion. On the basis of guidance from the battalion commander and S3, the FSCoord and/or FSO (DS units), reinforced FA unit FDO (R & GSR units), and force FA HQ, the FDO decides where and how the battalion and any reinforcing units will fire. Specific FDO duties include:

- Supervise the FD section.
- Assist the FSCoord in developing the commander's criteria based on the supported maneuver commander's concept for FS. (FDOs in R/GSR/GS units provide input through the reinforced FA unit and/or force FA HQ.)
- Develop and supervise input of appropriate parameters into the AFATDS, Initial Fire Support Automation System (IFSAS), Fire Direction System (FDS), or Lightweight Tactical Fire Direction System (LTACFIRE). Coordination of these parameters with FSEs, reinforcing/reinforced FA units, and force FA HQ is critical. Coordination of digital communications and database elements may also be required with users of non-FA digital C2 systems.
- Analyze requested targets for attack by FA. Consider desired effects, method of fire, and types of ammunition needed.
- Ensure dissemination of fire plans and schedules of fires to subordinate and supporting unit FDCs and to FSEs occurs as appropriate.
- Coordinate with FSEs to process requests for other types of FS.
- Maintain the current target overlay.
- Keep FA elements informed of targets.

- Establish procedures and train personnel to accomplish tactical and technical FD in a degraded (manual/voice) mode.
- Establish procedures for interface between AFATDS, IFSAS, FDS, or LTACFIRE units, as well as any other digital system with which the FDC may be required to interface.

CHIEF FIRE CONTROL SERGEANT

1-50. He is the automated technical and tactical fire control expert in the battalion FDC. He is responsible for: establishing the tactical database in the battalion automated fire control system; monitoring the technical input and executions of fire plans and missions; advising the FDO on changes or updates to battlefield geometry and firing unit status; and cross-checking status boards with system data.

BATTALION AMMUNITION OFFICER

1-51. The BAO or SPL manages resupply of ammunition in the FA battalion. His primary duties include the following:

- Manage the use of the battalion's ammunition-carrying assets.
- Manage ammunition movement from the ammunition transfer point (ATP) to the combat trains area and then forward to the batteries.
- Maintain accountability of ammunition.
- Ensure ammunition basic loads delivered to the batteries contain the proper mix and quantities of ammunition.
- Perform mission analysis to verify ammunition handling capabilities can support current operations. Report shortcomings to the S3.
- Manage turn-in of residue and unexpended ammunition.

FIRE SUPPORT ELEMENTS

BRIGADE FIRE SUPPORT OFFICER

1-52. The FSCOORD cannot be at the brigade HQ constantly. Therefore, he has an assistant, the brigade FSO, to serve as a full-time liaison between the DS FA battalion and the maneuver brigade. The brigade FSO's duties and responsibilities are outlined in FM 6-20-40.

BATTALION FIRE SUPPORT OFFICER

1-53. The battalion FSO is the FSCOORD and principal FS advisor to the maneuver battalion commander. He is in charge of the battalion FSE and serves as the DS FA battalion commander's representative to the maneuver battalion commander. The battalion FSO's duties and responsibilities are outlined in FM 6-20-40.

LIAISON OFFICER

1-54. A LNO assists his FA battalion in accomplishing liaison with another FA unit or, when necessary, any other HQ with which the battalion requires liaison. Liaison is usually required as an inherent responsibility of a R or

GSR mission, but may also be used in any situation that requires extremely close coordination with another unit. A LNO is usually part of an organic liaison section, found in corps FA battalions and some divisional/GS battalions. However, when necessary, battalions without an organic liaison section sometimes create temporary liaison elements out of existing assets. A more detailed discussion of the liaison function is in Chapter 2.

1-55. Because the LNO represents his commander, he must have the commander's full confidence. He should be able to:

- Understand how his commander thinks and represent his position.
- Interpret his commander's messages.
- Convey his commander's vision, mission, and concept of operations and guidance.

1-56. The LNO's professional capabilities and personal characteristics must encourage confidence and cooperation with the commander and staff of the receiving unit. He must possess tact and:

- Be thoroughly knowledgeable of his unit's mission and its TTP; organization; capabilities; and communications equipment.
- Quickly become familiar with the receiving unit's organization, capabilities, mission, tactics, TSOP, and staff procedures. In the case of multinational forces, the LNO must also understand the receiving unit's doctrine and customs.
- Be familiar with the requirements for and the purpose of liaison; the liaison system, and its corresponding reports, reporting documents, and records; and the training of the liaison team.
- Observe the established channels of command and staff functions.

1-57. In addition to those listed in FM 101-5, the LNO's duties may include:

- Facilitate the exchange of situational awareness data between the two units – especially friendly and enemy FA information, fire plans, target lists, CSS information.
- Represent the reinforcing unit during the supported unit's MDMP and development of the FASP.
- Assist the S3 and S2 with the counterfire fight, and other missions that significantly involve the reinforcing unit.
- Assist the S2 with targeting and the rapid dissemination of targeting information to the reinforcing unit.
- Assist the S3s of both battalions in identifying EFATs and determining EFAT responsibilities for the reinforcing unit.
- Advise the S2 and S3 of CCIR and force protection support required by the reinforcing unit.
- Assist both units in development of MSU plans and CONOPS plans. Ensure MSU and CONOPS plans address the liaison function.
- Assist the staffs of both units in establishing and maintaining effective communication with their counterparts.

RADAR SECTION LEADER

1-58. In battalions that have an organic or attached radar section, the radar section leader is a key participant in the battalion's planning and operations. The radar section leader, assisted by the radar section chief, performs the day-to-day supervision of the radar section. He monitors and directs the training and performance of radar personnel and supervises operation, maintenance, and trouble shooting of radar equipment. He also:

- Advises the FA battalion commander and his staff on radar operations.
- Participates in developing radar employment plans and orders.
- Ensures the capabilities and limitations of the radar are considered.
- Selects radar positions that support the search sector requirements of planned zones, optimize TA, and facilitate movement.
- Identifies zone restrictions violated during planning and rehearsals.
- Coordinates, through the S3, positioning and security for the section.